

[54] CEMENTITIOUS COMPOSITIONS

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[56] References Cited

U.S. PATENT DOCUMENTS

2,868,753 1/1959 Morgan et al. 260/29.6 S
3,197,428 7/1965 Siegle 260/29.6 S
3,360,493 12/1967 Evans 260/29.6 S
3,547,853 12/1970 Kalandiak 260/29.6 S

3,937,633 2/1976 Knight et al. 260/29.6 S
4,002,713 1/1977 Duncan et al. 260/29.6 S
4,043,827 8/1977 Bernett 260/29.6 S

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[57]

ABSTRACT

In U.S. Pat. No. 4,070,199 we have described cured polymer-containing cementitious compositions of high modulus of rupture. The cured compositions are made by curing the product of subjecting to a homogenization process comprising high shear mixing (e.g. extrusion or calendering) the ingredients hydraulic cement, water and a selected water-dispersible polymer. The polymer is selected by a test which determines thermally its effect on the cement hydration reaction. The present invention describes the use in similar compositions of a class of water-dispersible acidic polymer, not selected by the above-mentioned test, which contains a specified proportion of carboxyl groups.

Shaped products comprised of the new cured compositions of high modulus of rupture are useful, for example, in building applications where previously it was necessary to employ asbestos in admixture with the cement.

13 Claims, No Drawings